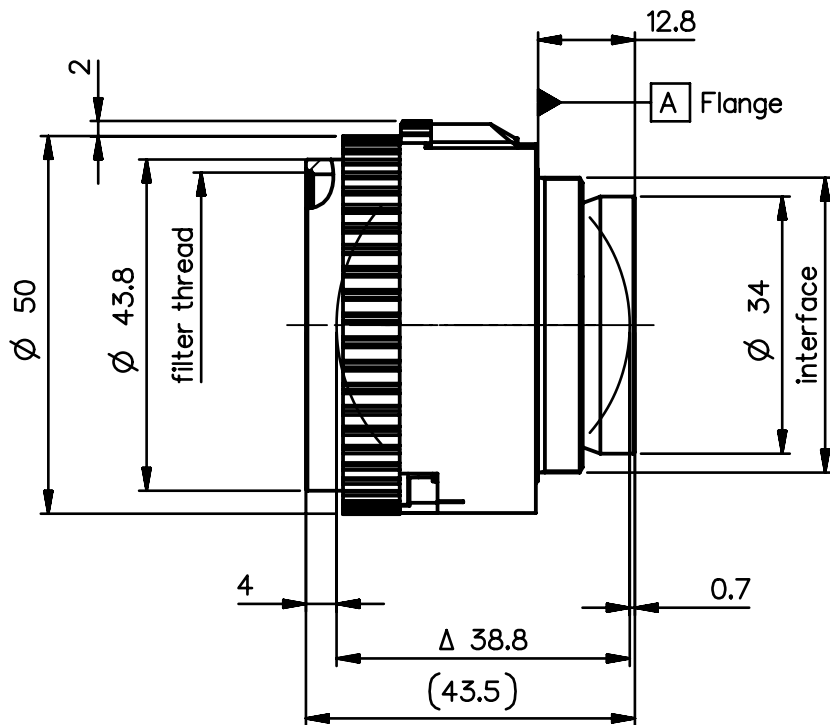
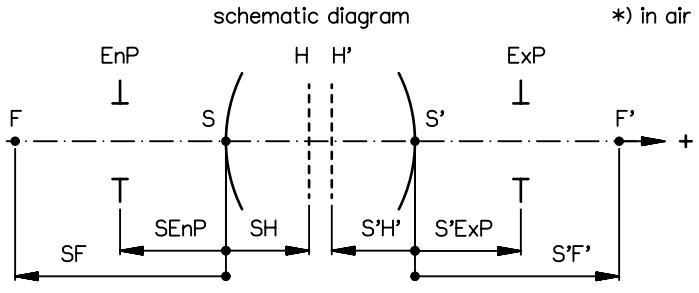


order number	lens name
0703-043-000-20	Apo Rodagon-D 5.6/120



Specification	ON	7514-9022	
image circle max. (mm)	102	working distance (mm)	242 - 456
focal length f' (mm) *	119.9	interface	M39 x1/26" (Leica)
magnification β' [range]	-0.5 [-0.8 ... -0.33]	filter thread	M40.5 x0.5
spectral range λ (nm)	400 - 750	weight (g)	110



design includes CCD cover glass:	no						
SF (mm)	-97.2	f-stop	5.6	∅ EnP	20.7	∅ Exp	20.7
S'F' (mm) *	100.9						
HH' (mm) *	-3.0						
SH (mm)	22.7						
S'H' (mm) *	-19.0						
SEnP (mm)	22.8						
S'ExP (mm) *	-18.9						

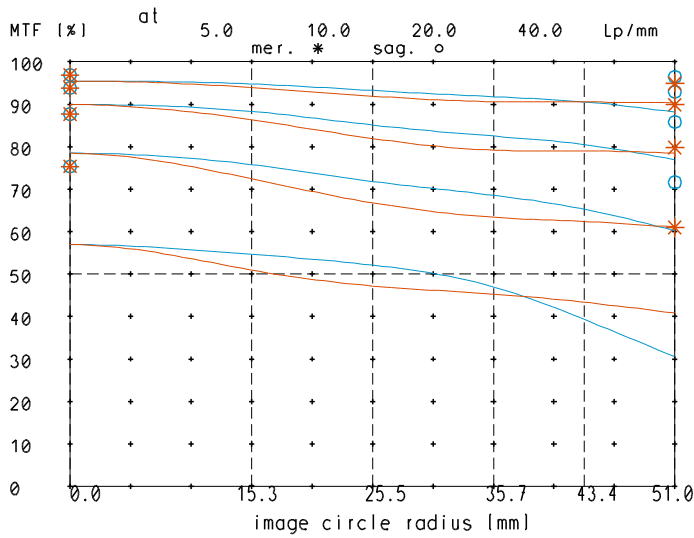
NX PROTECTIVE NOTE "DIN ISO 16016" TO BE OBSERVED	EU-D	AL-T1A	US-D	US-ML	not export controlled	
				PDM Status	Freigabe	
	REV	ECC	DATE	APPROVED	GENERAL TOLERANCE OF DIMENSION, FORM, POS.	SURF. TREATMT
	a	Neuausg				
	b	08-281	27.08.08	Strozew		
	c	11-358	18.07.11	Kuehne		
	d	12-0013	31.01.12	Schiffe		
e	12-0185	27.03.12	Schuber			
f	14-0184	14.08.14	Schiffe			
				FIRST	DATE	NAME
				ISSUE	16.05.08	Strozews
				CHKD	16.05.08	Schaeffler
				TITLE		
				Apo Rodagon-D 5.6/120		
				DRAWING NO.		SHEET 1
				0703-043-100-00-0001f		OF 1
				REPLACES		

ALL DIMENSIONS ARE IN MM AND INCLUDE SURFACE TREATMENT

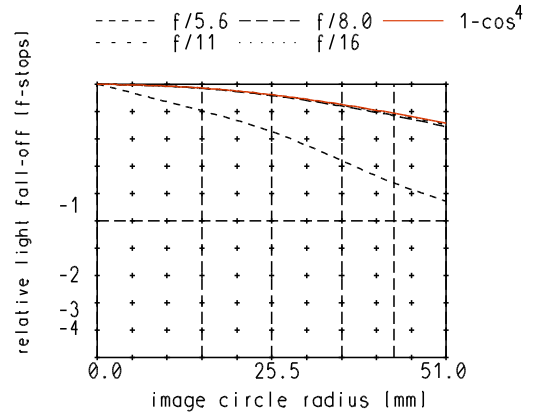


Apo-Rodagon-D_5.6/120

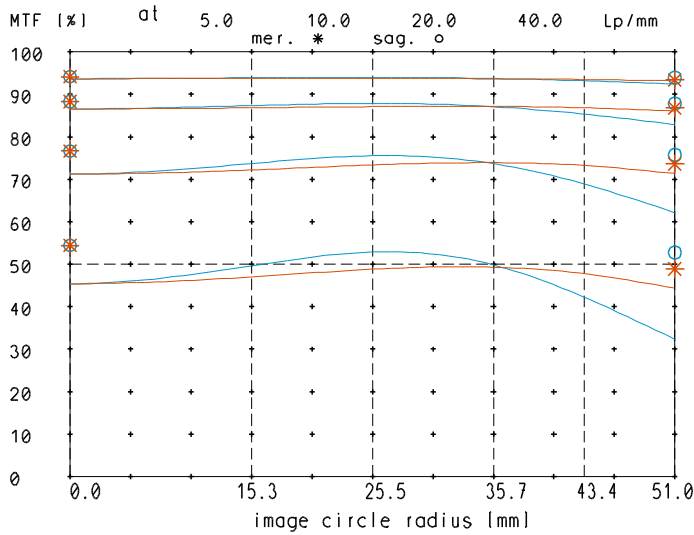
MTF at ratio -0.5 f/ 5.6



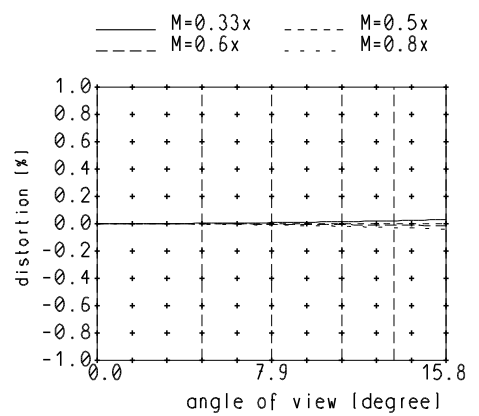
relative light fall-off at ratio -0.5



MTF at ratio -0.5 f/ 11

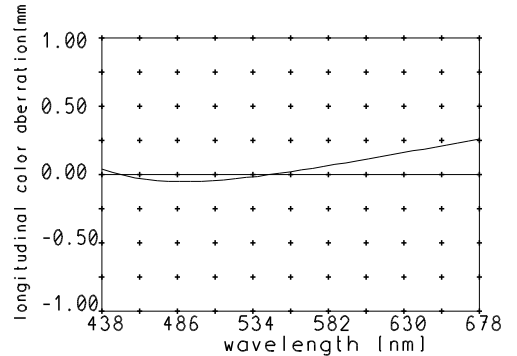


Distortion at ratio 0.33x to 0.8x



— sagittal. o Diffraction limited value
 — meridional * Diffraction limited value

Longitudinal color aberration at ratio -0.5



Named frequencies (line pairs/mm) in modular transfer function (MTF) as well as diagrams of relative light fall-off, distortion and longitudinal color aberration refer to film plane.